

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 09/581,528G
Source: 1FW16
Date Processed by STIC: 9/29/05

ENTERED



IFW16

RAW SEQUENCE LISTING

DATE: 09/29/2005

PATENT APPLICATION: US/09/581,528G

TIME: 11:34:00

Input Set : A:\P19743.txt

Output Set: N:\CRF4\09292005\I581528G.raw

3 <110> APPLICANT: TAKEDA, Masatoshi
 4 TAKEDA, Junji
 6 <120> TITLE OF INVENTION: Gene-Mutated Animal
 8 <130> FILE REFERENCE: P19743
 10 <140> CURRENT APPLICATION NUMBER: 09/581,528G
 11 <141> CURRENT FILING DATE: 2000-10-26
 13 <150> PRIOR APPLICATION NUMBER: PCT/JP99/00015
 14 <151> PRIOR FILING DATE: 1999-01-07
 16 <150> PRIOR APPLICATION NUMBER: JP H10/2191
 17 <151> PRIOR FILING DATE: 1998-01-08
 19 <160> NUMBER OF SEQ ID NOS: 22
 21 <170> SOFTWARE: PatentIn version 3.3
 23 <210> SEQ ID NO: 1
 24 <211> LENGTH: 467
 25 <212> TYPE: PRT
 26 <213> ORGANISM: Human
 28 <400> SEQUENCE: 1
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 31 1 5 10 15
 34 Ser Glu Asp Asn His Leu Ser Asn Thr Val Arg Ser Gln Asn Asp Asn
 35 20 25 30
 38 Arg Glu Arg Gln Glu His Asn Asp Arg Arg Ser Leu Gly His Pro Glu
 39 35 40 45
 42 Pro Leu Ser Asn Gly Arg Pro Gln Gly Asn Ser Arg Gln Val Val Glu
 43 50 55 60
 46 Gln Asp Glu Glu Glu Asp Glu Glu Leu Thr Leu Lys Tyr Gly Ala Lys
 47 65 70 75 80
 50 His Val Ile Met Leu Phe Val Pro Val Thr Leu Cys Met Val Val Val
 51 85 90 95
 54 Val Ala Thr Ile Lys Ser Val Ser Phe Tyr Thr Arg Lys Asp Gly Gln
 55 100 105 110
 58 Leu Ile Tyr Thr Pro Phe Thr Glu Asp Thr Glu Thr Val Gly Gln Arg
 59 115 120 125
 62 Ala Leu His Ser Ile Leu Asn Ala Ala Ile Met Ile Ser Val Ile Val
 63 130 135 140
 66 Val Met Thr Ile Leu Leu Val Val Leu Tyr Lys Tyr Arg Cys Tyr Lys
 67 145 150 155 160
 70 Val Ile His Ala Trp Leu Ile Ile Ser Ser Leu Leu Leu Leu Phe Phe
 71 165 170 175
 74 Phe Ser Phe Ile Tyr Leu Gly Glu Val Phe Lys Thr Tyr Asn Val Ala
 75 180 185 190
 78 Val Asp Tyr Ile Thr Val Ala Leu Ile Trp Asn Phe Gly Val Val
 79 195 200 205

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82 Gly Met Ile Ser Ile His Trp Lys Gly Pro Leu Arg Leu Gln Gln Ala
 83 210 215 220
 86 Tyr Leu Ile Met Ile Ser Ala Leu Met Ala Leu Val Phe Ile Lys Tyr
 87 225 230 235 240
 90 Leu Pro Glu Trp Thr Ala Trp Leu Ile Leu Ala Val Ile Ser Val Tyr
 91 245 250 255
 94 Asp Leu Asp Ala Val Leu Cys Pro Lys Gly Pro Leu Arg Met Leu Val
 95 260 265 270
 98 Glu Thr Ala Gln Glu Arg Asn Glu Thr Leu Phe Pro Ala Leu Ile Tyr
 99 275 280 285
 102 Ser Ser Thr Met Val Trp Leu Val Asn Met Ala Glu Gly Asp Pro Glu
 103 290 295 300
 106 Ala Gln Arg Arg Val Ser Lys Asn Ser Lys Tyr Asn Ala Glu Ser Thr
 107 305 310 315 320
 110 Glu Arg Glu Ser Gln Asp Thr Val Ala Glu Asn Asp Asp Gly Gly Phe
 111 325 330 335
 114 Ser Glu Glu Trp Glu Ala Gln Arg Asp Ser His Leu Gly Pro His Arg
 115 340 345 350
 118 Ser Thr Pro Glu Ser Arg Ala Ala Val Gln Glu Leu Ser Ser Ser Ile
 119 355 360 365
 122 Leu Ala Gly Glu Asp Pro Glu Glu Arg Gly Val Lys Leu Gly Leu Gly
 123 370 375 380
 126 Asp Phe Ile Phe Tyr Ser Val Leu Val Gly Lys Ala Ser Ala Thr Ala
 127 385 390 395 400
 130 Ser Gly Asp Trp Asn Thr Thr Ile Ala Cys Phe Val Ala Ile Leu Ile
 131 405 410 415
 134 Gly Leu Cys Leu Thr Leu Leu Leu Leu Ala Ile Phe Lys Lys Ala Leu
 135 420 425 430
 138 Pro Ala Leu Pro Ile Ser Ile Thr Phe Gly Leu Val Phe Tyr Phe Ala
 139 435 440 445
 142 Thr Asp Tyr Leu Val Gln Pro Phe Met Asp Gln Leu Ala Phe His Gln
 143 450 455 460
 146 Phe Tyr Ile
 147 465

150 <210> SEQ ID NO: 2

151 <211> LENGTH: 1404

152 <212> TYPE: DNA

153 <213> ORGANISM: Human

155 <400> SEQUENCE: 2

156 atgacagagt tacctgcacc gttgtcctac ttccagaatg cacagatgtc tgaggacaac 60
 158 cacctgagca atactgtacg tagccagaat gacaatagag aacggcagga gcacaacgac 120
 160 agacggagcc ttggccaccc tgagccatta tctaattggac gaccccaggg taactcccgg 180
 162 caggtggttg agcaagatga ggaagaagat gaggagctga cattgaaata tggcgccaag 240
 164 catgtgatca tgctctttgt ccctgtgact ctctgcatgg tgggtggtcgt ggctactatt 300
 166 aagtcagtca gcttttatac ccggaaggat gggcagctaa tctatacccc attcacagaa 360
 168 gataccgaga ctgtgggcca gagagccctg cactcaattc tgaatgctgc catcatgac 420
 170 agtgtcattg ttgtcatgac taccctcctg gtggttctgt ataaatacag gtgctataag 480
 172 gtcacccatg cctggcctat tatatcatct ctattgttgc tgttcttttt ttcattcatt 540
 174 tacttggggg aagtgtttaa aacctataac gttgctgtgg actacattac tgttgcactc 600

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176 ctgatctgga attttggtgt ggtgggaatg atttccattc actggaaagg tccacttcga      660
178 ctccagcagg catatctcat tatgattagt gccctcatgg ccctggtggt tatcaagtac      720
180 ctccctgaat ggaactgcgtg gctcatcttg gctgtgattt cagtatatga tttagtggct      780
182 gttttgtgtc cgaaagggtcc acttcgtatg ctggttgaaa cagctcagga gagaaatgaa      840
184 acgctttttc cagctctcat ttactcctca acaatggtgt ggttggtgaa tatggcagaa      900
186 ggagaccggg aagctcaaag gagagtatcc aaaaattcca agtataatgc agaaagcaca      960
188 gaaagggagt cacaagacac tgttgccagag aatgatgatg gcgggttcag tgaggaatgg     1020
190 gaagcccaga gggacagtca tctagggcct catcgctcta cacctgagtc acgagctgct     1080
192 gtccaggaac tttccagcag taccctcgct ggtgaagacc cagaggaaaag gggagtaaaa     1140
194 cttggattgg gagatttcat tttctacagt gttctgggtg gtaaagcctc agcaacagcc     1200
196 agtggagact ggaacacaac catagcctgt ttcgtagcca tattaattgg tttgtgcctt     1260
198 acattattac tccttgccat tttcaagaaa gcattgccag ctcttccaat ctccatcacc     1320
200 tttgggcttg ttttctactt tgccacagat tatcttgtag agccttttat ggaccaatta     1380
202 gcattccatc aattttatat cttag                                     1404
205 <210> SEQ ID NO: 3
206 <211> LENGTH: 467
207 <212> TYPE: PRT
208 <213> ORGANISM: Mouse
210 <400> SEQUENCE: 3
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213 1          5          10          15
216 Ser Glu Asp Ser His Ser Ser Ser Ala Ile Arg Ser Gln Asn Asp Ser
217          20          25          30
220 Glu Glu Arg Gln Gln Gln His Asp Arg Gln Arg Leu Asp Asn Pro Glu
221          35          40          45
224 Pro Ile Ser Asn Gly Arg Pro Gln Ser Asn Ser Arg Gln Val Val Glu
225          50          55          60
228 Gln Asp Glu Glu Glu Asp Glu Glu Leu Thr Leu Lys Tyr Gly Ala Lys
229 65          70          75          80
232 His Val Ile Met Leu Phe Val Pro Val Thr Leu Cys Met Val Val Val
233          85          90          95
236 Val Ala Thr Ile Lys Ser Val Ser Phe Tyr Thr Arg Lys Asp Gly Gln
237          100         105         110
240 Leu Ile Tyr Thr Pro Phe Thr Glu Asp Thr Glu Thr Val Gly Gln Arg
241          115         120         125
244 Ala Leu His Ser Ile Leu Asn Ala Ala Ile Met Ile Ser Val Ile Val
245          130         135         140
248 Ile Met Thr Ile Leu Leu Val Val Leu Tyr Lys Tyr Arg Cys Tyr Lys
249 145         150         155         160
252 Val Ile His Ala Trp Leu Ile Ile Ser Ser Leu Leu Leu Leu Phe Phe
253          165         170         175
256 Phe Ser Phe Ile Tyr Leu Gly Glu Val Phe Lys Thr Tyr Asn Val Ala
257          180         185         190
260 Val Asp Tyr Val Thr Val Ala Leu Leu Ile Trp Asn Phe Gly Val Val
261          195         200         205
264 Gly Met Ile Ala Ile His Trp Lys Gly Pro Leu Arg Leu Gln Gln Ala
265          210         215         220
268 Tyr Leu Ile Met Ile Ser Ala Leu Met Ala Leu Val Phe Ile Lys Tyr
269 225         230         235         240

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272 Leu Pro Glu Trp Thr Ala Trp Leu Ile Leu Ala Val Ile Ser Val Tyr
 273 245 250 255
 276 Asp Leu Val Ala Val Leu Cys Pro Lys Gly Pro Leu Arg Met Leu Val
 277 260 265 270
 280 Glu Thr Ala Gln Glu Arg Asn Glu Thr Leu Phe Pro Ala Leu Ile Tyr
 281 275 280 285
 284 Ser Ser Thr Met Val Trp Leu Val Asn Met Ala Glu Gly Asp Pro Glu
 285 290 295 300
 288 Ala Glu Arg Arg Val Pro Lys Asn Pro Lys Tyr Asn Thr Gln Arg Ala
 289 305 310 315 320
 292 Glu Arg Glu Thr Gln Asp Ser Gly Ser Gly Asn Asp Asp Gly Gly Phe
 293 325 330 335
 296 Ser Glu Glu Trp Glu Ala Gln Arg Asp Ser His Leu Gly Pro His Arg
 297 340 345 350
 300 Ser Thr Pro Glu Ser Arg Ala Ala Val Gln Glu Leu Ser Gly Ser Ile
 301 355 360 365
 304 Leu Thr Ser Glu Asp Pro Glu Glu Arg Gly Val Lys Leu Gly Leu Gly
 305 370 375 380
 308 Asp Phe Ile Phe Tyr Ser Val Leu Val Gly Lys Ala Ser Ala Thr Ala
 309 385 390 395 400
 312 Ser Gly Asp Trp Asn Thr Thr Ile Ala Cys Phe Val Ala Ile Leu Ile
 313 405 410 415
 316 Gly Leu Cys Leu Thr Leu Leu Leu Leu Ala Ile Phe Lys Lys Ala Leu
 317 420 425 430
 320 Pro Ala Leu Pro Ile Ser Ile Thr Phe Gly Leu Val Phe Tyr Phe Ala
 321 435 440 445
 324 Thr Asp Tyr Leu Val Gln Pro Phe Met Asp Gln Leu Ala Phe His Gln
 325 450 455 460
 328 Phe Tyr Ile
 329 465

332 <210> SEQ ID NO: 4

333 <211> LENGTH: 1404

334 <212> TYPE: DNA

335 <213> ORGANISM: Mouse

337 <400> SEQUENCE: 4

338 atgacagaga tacctgcacc tttgtcctac ttccagaatg cccagatgtc tgaggacagc 60
 340 cactccagca gcgccatccg gagccagaat gacagccaag aacggcagca gcagcatgac 120
 342 aggcagagac ttgacaaccc tgagccaata tctaattggc ggccccagag taactcaaga 180
 344 caggtggtgg aacaagatga ggaggaagac gaagagctga cattgaaata tggagccaag 240
 346 catgtcatca tgctctttgt ccccgtagacc ctctgcatgg tcgtcgctcg ggccaccatc 300
 348 aatcagtcga gcttctatac ccggaaggac ggtagctaa tctacacccc attcacagaa 360
 350 gacactgaga ctgtaggcca aagagccctg cactcgatcc tgaatgcggc catcatgatc 420
 352 agtgtcattg tcattatgac catcctcctg gtggtcctgt ataaatacag gtgctacaag 480
 354 gtcacccacg cctggcttat tatttcattc ctgttggtgc tgttcttttt ttggttcatt 540
 356 tacttagggg aagtatttaa gacctacaat gtgcgcgtgg actacgttac agtagcactc 600
 358 ctaatctgga attttggtgt ggtcgggatg attgccatcc actggaaagg ccccttcga 660
 360 ctgcagcagg cgtatctcat tatgatcagt gccctcatgg ccctggtatt tatcaagtac 720
 362 ctccccgaat ggaccgcatg gctcatcttg gctgtgattt cagtatatga tttggtggct 780
 364 gttttatgtc ccaaaggccc acttcgtatg ctggttgaaa cagctcagga aagaaatgag 840

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366 actctcttttc cagctcttat ctattcctca acaatgggtgt ggttgggtgaa tatggctgaa      900
368 ggagacccag aagcccaaag gaggggtaccc aagaacccca agtataaacac acaaagagcg      960
370 gagagagaga cacaggacag tggttctggg aacgatgatg gtggcttcag tgaggagtgg     1020
372 gagggccaaa gagacagtca cctggggcct catcgctcca ctcccgagtc aagagctgct     1080
374 gtccaggaac tttctgggag cattctaacg agtgaagacc cggaggaaaag aggagtaaaa     1140
376 cttggactgg gagatttcat tttctacagt gttctggttg gtaaggcctc agcaaccgcc     1200
378 agtggagact ggaacacaac catagcctgc tttgtagcca tactgatcgg cctgtgcctt     1260
380 acattactcc tgctcgccat tttcaagaaa gcgttgccag cctcccccac ctccatcacc     1320
382 ttcgggctcg tgttctactt cgccacggat taccttgtgc agcccttcat ggaccaactt     1380
384 gcattccatc agttttatat ctag                                     1404
387 <210> SEQ ID NO: 5
388 <211> LENGTH: 25
389 <212> TYPE: DNA
390 <213> ORGANISM: Artificial
392 <220> FEATURE:
393 <223> OTHER INFORMATION: Primer
395 <400> SEQUENCE: 5
396 ggaattttgg tgtggtcggg atgat                                     25
399 <210> SEQ ID NO: 6
400 <211> LENGTH: 23
401 <212> TYPE: DNA
402 <213> ORGANISM: Artificial
404 <220> FEATURE:
405 <223> OTHER INFORMATION: Primer
407 <400> SEQUENCE: 6
408 ggtccattcg gggagggtact tga                                     23
411 <210> SEQ ID NO: 7
412 <211> LENGTH: 36
413 <212> TYPE: DNA
414 <213> ORGANISM: Artificial
416 <220> FEATURE:
417 <223> OTHER INFORMATION: Primer
419 <400> SEQUENCE: 7
420 tgtggtcggg atgacgcgcca cccactggaa aggccc                                     36
423 <210> SEQ ID NO: 8
424 <211> LENGTH: 36
425 <212> TYPE: DNA
426 <213> ORGANISM: Artificial
428 <220> FEATURE:
429 <223> OTHER INFORMATION: Primer
431 <400> SEQUENCE: 8
432 gggcctttcc agtgggtggc gatcatcccg accaca                                     36
435 <210> SEQ ID NO: 9
436 <211> LENGTH: 18
437 <212> TYPE: DNA
438 <213> ORGANISM: Artificial
440 <220> FEATURE:
441 <223> OTHER INFORMATION: Primer
443 <400> SEQUENCE: 9

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RAW SEQUENCE LISTING ERROR SUMMARY DATE: 09/29/2005
PATENT APPLICATION: US/09/581,528G TIME: 11:34:01

Input Set : A:\P19743.txt
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:20; N Pos. 20,21,22

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22

VERIFICATION SUMMARY

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L:614 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0